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CAREER AGILITY FOR FUTURE EMPLOYEES. AN INNOVATIVE BE(A)ST FRAMEWORK FOR THE DIGITAL ERA

Abstract

Objectives: The primary objective of this study is to present the BE(A)ST framework – an innovative, agile approach to career development that reimagines future employees as adaptive, self-driven professionals navigating their paths through experimentation, iteration, and self-discovery. The framework supports learners in aligning personal development with VUCA-driven market realities by treating careers as evolving prototypes.

Material and methods: The study employs a mixed-methods design within a Design Thinking framework. It begins with persona development based on interviews and focus groups, followed by validation through a cross-national survey. Collaborative workshops were used to identify tools matched to stakeholder needs, leading to the creation of the Student Purposeful Development Toolbox.

Results: The research identified three core competencies of career agility: technological adaptability, agile learning, and proactive career navigation. Qualitative insights from workshops led to the design of actionable tools fostering career self-awareness, iterative planning, and professional identity-building. These results demonstrate the feasibility and effectiveness of embedding agile career support in higher education contexts.

Conclusions: The BE(A)ST framework offers a robust and innovative response to career development challenges in a volatile and uncertain world. It reframes career planning as an iterative, user-centered process of exploration and adaptation. The Student Purposeful Development Toolbox, co-designed with users, provides a practical means of cultivating career agility. The study calls for the integration of agile, design-based career support practices into educational systems to enhance learner autonomy, motivation, and long-term employability.

Keywords: *Career Agility, BE(A)ST Framework, Design Thinking in Education, DYLMIC project, VUCA Environment, Agile Career Development*

Introduction

Most employees' development strategies assume that the skills and knowledge learned today can be applied to tomorrow's conditions without any changes. This suggests that it is possible to prepare the plan first and then execute it later without any significant changes. As it is widely discussed, VUCA (Volatility, Uncertainty, Complexity and Ambiguity) environment has changed such assumptions and requires new approaches to develop employees at all levels of the organization. Huque et al. (2022) report the necessity of upskilling and adapting to new technologies for career sustainability in agile environments. The employees should be able to learn and adapt in changing contexts. Paradigm shift is well visible.

The original and innovative approach described in this paper assumes that digital era enterprises' staff members, instead of planning and then executing, will *prototype, test and revise professional development plans* in *an agile and continuous manner*. In order to do that, they need a proper mindset, framework and set of tools. Moreover, this new way of thinking should be shaped as early as possible, preferably already during formal education at university, or even earlier. These insights have driven our motivations for a projects in which main outcome is to provide young people (future employees of digital era enterprises) with a comprehensive approach including the toolbox and framework that comply with proper mindset and may be used for agile development of education track and/or professional career. Such an approach should be rather a *compass* than *facilities for long-term planning*.

The primary purpose of this paper is to present the BE(A)ST framework – an innovative concept for agile career development tailored to the needs of future employees in the digital era. This work is positioned as a research and development contribution as it not only conceptualizes the need for career agility, but also translates this understanding into a practical, co-designed solution in the form of the Student Purposeful Development Toolbox. The aim is to provide both theoretical grounding and actionable methods that can support students in navigating dynamic career landscapes, with implications for educational practice, career support services, and curriculum design.

From a research perspective, the scope of the paper includes qualitative and quantitative analyses conducted within the BEAST family of international projects. These projects involved multi-stakeholder collaboration (students, academic staff, and career office employees) and applied Design Thinking methodology to co-create a practical framework and toolbox. Cognitively, the study aims to reframe traditional, linear views of career development by introducing an agile, iterative model centered on professional identity and self-direction. The findings contribute to a deeper understanding of how educational systems can foster adaptive, future-ready mindsets and support graduates in navigating VUCA-driven labor markets.

Theoretical Background – Career Agility in the VUCA World

This section outlines the conceptual underpinnings of career agility, linking them to the evolving demands of the digital-era labor market and the VUCA context.

The traditional model of linear career progression – education, stable employment, then family – has been replaced by diverse, individualized paths. Individuals now play an active role in shaping their careers. Millennials have introduced new values to the workplace, such as flexibility, work-life balance, and environmental awareness. At the same time, long-term employment is declining in favor of part-time, contract, and project-based work. The rise of the freelance economy increases uncertainty, particularly for students at the start of their careers. This environment is marked not only by uncertainty, but also by volatility, complexity, and ambiguity – summarized by the concept of VUCA (Leroy, 2019, p. 7). VUCA realities significantly affect required career competencies across sectors. As Nimmi et al. (2020) note, a protean career attitude – self-directed and flexible – is closely linked to continuous learning and employability. Future employees must view themselves as one-person enterprises, capable of iterating their personal business models. Rather than defining themselves by specific roles, they should cultivate a stable professional identity adaptable to emerging job types. In this context, career development becomes a sequence of evolving projects that foster creativity, well-being, and adaptability. Core competencies for career agility in a VUCA world include: (a) self-management and flexibility (b) designing a career with commitment throughout one's life, (c) building a professional identity a sense of meaning despite diverse work arrangements, (d) finding work that meets basic needs despite the emergence of new employment relationships. To put it differently the future staff members working in VUCA driven enterprises must be agile when it comes to career development.

According to widespread definitions from both popular career development websites and academic publications, career agility can be defined as:

- *An agile career is a self-reflective, incremental career path, guided by response to change, evolving job roles, and designed to optimize creativity, growth, and happiness* (Konstant, 2018).

- *Career Agility itself refers to the quality of career readiness, of being hopeful, optimistic, flexible, resilient and creative in your career development process. It means you can effectively navigate the wide range of positive and negative experiences we encounter at work on a daily basis* (Murphy, 2021).
- *Agility as a means of coping with complex situations where there is an element of uncertainty and involves a degree of experimentation and iterative learning* (Beckett, 2021, p. 123).
- *Career agility as a form of externally driven positive emotional coping in anticipating and solving the challenges that the digital age brings to professions, jobs, and careers* (Coetzee, 2021, p. 37).

Analyzing the above-mentioned definitions, we can see that they aligns with current market demands and forms the basis of the BE(A)ST framework.

Career agility includes many aspects. The most important, from the perspective of our research, are the following (Coetzee et al., 2020), which also provided the conceptual pillars that guided the development of the BE(A)ST framework and Toolbox:

- Technological adaptability – a positive attitude towards the opportunities presented by new technologies (e.g. Industry 4.0 and digital transformation of the enterprises). Individuals with this trait consciously seek out new professional roles related to digitization and update their knowledge and skills to take advantage of new opportunities.
- Agile learning – positive excitement and effectiveness in setting and managing career goals. Individuals with this trait actively seek opportunities to learn new skills that can enhance career success and accelerate career development.
- Career navigation – positive and effective behaviors associated with searching the environment for new career opportunities. Individuals with this trait want to be well informed about labor market opportunities and apply them to their own careers at the appropriate time. They also do not perceive the uncertainty associated with career development as something disturbing, but rather as an opportunity.

People who are career agile are not tied to one way of thinking about work and job roles. However this does not mean that they take ill-considered actions related to their careers. They are able to change direction quickly, but with analysis of possible future scenarios. The ability to respond calmly to both positive and negative changes in the environment provides a competitive advantage over other workers in the job market. Agile career planning also means taking personality attributes into consideration. Changes should not be made against abilities, skills, and worldview. Agile career developers are characterized by a proactive attitude, creativity and innovation, have entrepreneurial skills. They do not have to be passive recipients of job offers; they can actively influence the work context. Research shows that individuals with high levels of career agility are able to identify more career options and opportunities, are more confident in their decision making, are aware of their strengths and weaknesses, are more successful in the job search and planning process, are able to set goals, adapt to change, receive more job offers and create careers that are meaningful and rewarding (Murphy, 2021). Recent studies (Khalid and Al Zahrani, 2024) report a positive relationship between learning agility, task performance, and retention.

Methodology – A Design Thinking-Driven Development Process

The research followed a development methodology grounded in Design Thinking. It involved multi-stakeholder collaboration, qualitative persona development, quantitative validation, and iterative workshop-based prototyping to co-create the BE(A)ST framework and toolbox.

Concept Development and BE(A)ST Framework Design

The BEAST approach was developed by authors of this paper in cooperation with scientists from partner universities in the frame of three projects: *Adaption and Evolution D.Y.L. Methodology to Individualized Career Planning in Higher*

Education Institutions – DYLMIC project supported by the Polish National Agency for Academic Exchange, *BE Aware STudent – BEAST project* and *Teach-BEASTs – Teaching to BE Aware STudents* supported in the frame the Erasmus+ Programme. The projects have been implemented by University of Information Technology and Management in Rzeszów, Alma Mater Studiorum – Universita Di Bologna, Instituto Politécnico De Portalegre, Université de Nice – Sophia Antipolis and Universitat Ramon Llull Fundacio. The BEAST family projects' outcomes can be used for career development during the educational process at the university from its beginning as well as after graduation when professional career starts. It enables young people to plan or re-plan the educational track at the university taking into consideration their passion/interests and personal resources with regard to current job market requirements.

BEAST approach differs from typical career development processes. In traditional approach to career design there is a sequential process that goes through two main stages: planning and execution. As in every linear approach, the next stage in the process begins when the previous one is fully completed. In the first stage, an individual plans his career path from beginning to the end and then executes the detailed plan. Any risk that appears is controlled by schedule and the emphasis is on executing the initial *frozen* plan as accurately as possible. A change is not welcomed.

The BEAST approach is agile in its core. It takes into consideration constant changes driven by VUCA, agile career planning and implementation. We have developed BEAST Agile Career Development Manifesto containing the values that should drive the activities of everybody who would like to effectively and efficiently manage his professional development. Our manifesto defines the following pillars of agility in career development:

- passion and interests should be the main drivers of professional development because they are much more important for well-being and fulfillment than formal education,
- professional development nowadays, especially in VUCA environment, should be based on prototyping, testing and revising rather than planning and following the long-term plans,
- career development should be focused on professional identity rather than on specific job position(s); new job positions appear and

other vanish, but market attractiveness of value proposition based on professional identity is more stable,
- understanding and internalizing life-long learning philosophy and being ready to respond fast to changes enable to find a fit between current job market requirements and personal resources.

In BEAST approach we have assumed that a risk can be controlled by fast response to changes that are quite common in VUCA world. Instead of planning first and then executing pre-defined plans, individual should prototype professional development/education track according to current situation (his personal resources/job market requirements) and then test and revise plans in continuous and iterative manner. It is similar to sprints in software development with SCRUM, but in BEAST there are career development sprints. Such process, to be conducted effectively, must be supported with proper techniques/tools to create and analyze possible future career scenarios and quickly modify them when the changes occur. These tools should be rather a *compass* than the facilities for long-term, detailed planning.

The BE(A)ST framework is conceptually grounded in contemporary theories of career agility, career construction, and design-based education. It draws on definitions and models proposed by Coetzee (2020, 2021), Murphy (2021), and Beckett (2021), which describe career agility as a multifaceted ability to respond adaptively to rapid changes in the job market through self-directed learning, strategic career navigation, and openness to technological innovation. These theoretical foundations were used to identify key competencies – technological adaptability, agile learning, and career navigation – as core attributes of career-agile individuals. These competencies emerged both from literature review and empirical research and directly informed the design of the BE(A)ST Manifesto and the selection of tools in the Student Purposeful Development Toolbox. Thus, the concept and its practical implementation are tightly aligned with the study's purpose: to develop a coherent, evidence-based approach to fostering career agility in future employees.

Initially the main technique in the BEAST approach was Personal Business Model Canvas (Clark, Osterwalder and Pigneur, 2012) and the job market requirements reference model in the form of the Career Canvas Catalog

(Jakiela, Świętoniowska and Wójcik, 2021a, 2021b). We have also adopted and adapted some techniques from Designing Your Life framework developed in Stanford University by Burnett and Evans (Burnett and Evans, 2016). All these elements organized in a comprehensive approach may be used in four key activities: self-reflection to identify personal resources, finding personal resources gaps, planning career development, revising the plans, and redesigning the career path if needed. In the DYLMIC project we have added new techniques and created Student Purposeful Development Toolbox. We have done this in student centered and agile manner. Next section describes how we have approached this task with Design Thinking framework.

BEAST Approach Development Process Using Design Thinking

Design Thinking is a human-centered problem-solving process (Melles, Howard and Thompson-Whiteside, 2012, p. 162) that provides numerous possibilities for innovation development (Brown and Wyatt, 2010, p. 33) and economic benefits. This concept merges different approaches: creative problem-solving, an out-of-the-box way of thinking, and a methodology that can be used in multidisciplinary settings (Tantiyaswasdikul, 2019, p. 47). Several design thinking models have been developed; they include from three to seven stages of the process. The Hasso-Plattner Institute of Design at Stanford (d.school) proposes the five following stages of the process (Henriksen, Richardson, and Mehta, 2017, p. 142): Empathise, Define, Ideate, Prototype, and Test. The UK's Design Council proposed four distinct phases: Discover, Define, Develop, and Deliver, which is known as the Double Diamond Model. The Discover stage helps us understand what the problem is. It involves interviewing and observing representatives of prospective user target groups. The aim of Define is to set up the challenge based on the knowledge elicited. The Develop stage is responsible for looking for inspiration as well as generating, reviewing, and selecting ideas. The Delivery phase consists of developing and testing different solutions on a small scale and rejecting those that do not work (Design Council, 2019). Recent studies show that integrating design thinking in higher education

boosts innovation, student engagement, and lifelong learning skills essential in a VUCA world. It fosters curiosity, collaboration, self-efficacy, and mastery (Seevaratnam et al., 2023), supporting career resilience. Reid and Kelestyn (2022) highlight its potential for promoting critical reflection and empowering students as co-creators of their career paths. Williams et al. (2021) emphasize its role in enhancing adaptability and lifelong learning.

Innovative aspect of our approach is that we have used Design Thinking framework on two levels. The first one is related to BEAST approach development. The outcomes in DYLMIC project, e.g. Student Purposeful Development Toolbox, has been created in the frame of Design Thinking stages. This will be presented in following sections. The next level is connected with the career development tools usage. On the operational level Design Thinking has been adopted to drive career development process with BEAST tools. Such unique combination provides BEAST users centricity (users' needs are main focus in the process) and agility with regard to career development process. It also stimulates agile career planners creativity and out-of-the box thinking.

Empirical Foundations – Personas and Survey Validation

The BEAST family projects address the needs of three stakeholders groups: students, academic teachers and career offices employees. All of the groups will supported with project outcomes; however we consider students/future staff members as a primary group of users. The reason is that students quite often do not realize the importance of planning their professional and educational career paths as early as possible. They treat the participation in classes (lectures, labs, projects) as an unpleasant necessity rather than an opportunity to develop personal resources – knowledge, skills – that may be considered on job market as a valuable assets. Providing young people with proper tools that will allow them to design educational path based on interests/passion, taking at the same time into account the current requirements of the labor market, will facilitate making more aware decisions about their professional future and increase internal motivation for active participation in classes and

other events. Academic teachers are a group that should take an active role in helping students make an aware educational decisions. To do that, teachers should define the content of their classes in correlation with the current labor market needs and serve as a mentors for students helping them to identify passion related professional areas, they should develop in order to meet in the future the requirements of the job market. The third group of stakeholders are the academic career officers supporting students in building appropriate competencies and identification of the directions of development that are particularly important for their professional identity.

In order to explore the specific needs of the stakeholders, we have used a human-centered approach which is part of the Design Thinking mindset. In the first step, on the basis of the focus groups as well as individual interviews, proto-personas have been developed. Each project's partner has conducted interviews with representatives of every group of stakeholders. Interviews were conducted with a groups consisted of 5-8 respondents. The research tool was a list of semi-structured questions, which constituted a *framework* for a discussion. The selection of participants for the interviews has been done with regard to rules on representative sample construction. Only the representatives of project stakeholders groups – students, career officers and academic teachers – were invited to interviews. Each group was interviewed separately. This division of participants allowed for an analysis of collected data and development of the proto-personas for each group of stakeholders (See sample persona on figure 1.1.).

Figure 1.1. *Student persona Marco*

Source: (DYLMIC Project Intellectual Outcomes Documentation)

Finally, 9 personas have been developed: 4 personas for students (Luís, Adèle, Lucyna, and Marco), 3 personas for academic teachers (Ania, Pedro, Valerio) and 2 personas for career offices staff members (Aurélie, Antoni). Each student persona represents the frame characteristics we have determined, such as: confused student; determined student, active student and reflective/passive student.

In the second step, student personas were validated using an online questionnaire designed and conducted by the Italian project partner under the supervision of Prof. Matteo Vignoli, Prof. Clio Dosi (University of Bologna), and Prof. Bernardo Balboni (University of Modena and Reggio Emilia). The survey, conducted in June–July 2021, suffered from a low response rate due to timing at the end of the academic term. The questionnaire consisted of demographic questions, 32 Likert-scale items on self-perception, and a section assessing identification with four developed personas (Luís, Adèle, Lucyna, Marco) using a 10-point scale. Respondents (N=83) came primarily from Poland (43.5%), Italy (25.3%), and Portugal (20.5%). The sample was 59% male and 37.3% female, mostly first-cycle students (65.1%), with the largest group being second-year undergraduates (31.3%). The reliability of the instrument was high (Cronbach's alpha = .887). The results confirmed partial alignment between self-assessments and persona identification, highlighting both the tool's relevance and the need for better reflection scaffolding.

The results are promising but also indicate potential improvement areas. First of all, the analysis of answers has shown discrepancies with the last part of the questionnaire on which the indicators were based. The reason may related to misunderstanding by some respondents of the persona technique. The responses to open-ended questions have shown that some of the choices of personas were caused by a focus on unimportant details. For example students who saw the biographical section of the persona with the description including: scouting instructor, mechanical engineering student, writing on a blog about sustainability, doing a project in Bulgaria, have finally rejected the persona because they have not had such experience. They should rather focus on the patterns of behavior presented by the model student. What is more despite the high level of the agreement presented by the indicators, the analysis of the answers to questions 1-32 has shown some discrepancies (e.g. the person identifying himself with Lucyna should agree with

the statements provided in some of the questions, but it was not the case). This may indicate students' problems with having a clear picture of their abilities and needs. The issues noted have induced us to relaunching the questionnaire.

Stakeholder Needs and Workshop Insights

In order to choose appropriate tools and techniques that should be a part of the Student Purposeful Development Toolbox, an online workshops with the attendance of international teams were conducted. The workshops have been conducted according to Design Thinking Double Diamond Model in the frame of the following stages: empathize, define, ideate, prototype and test.

Stage 1: Empathize – Research Users' Needs

Each team has prepared an empathy map for selected personas. In order to deeply understand the needs as well as characteristics of the groups described in the personas, they were analyzed from the perspective of the following questions: What do the personas most often hear?, What do they think and feel?, What do they see?, What do they say and do? Sample statements taken from empathy map developed for student Lucyna with regard to above mentioned questions are the following:

- **Hear** – *Lot of contradictory hints from colleagues about professional paths*, *Her parents tell her she can become whatever she wants*, *Different opinions about majors to select*, *Her friends are finding their paths*, *Professors voices about how their subjects will be hard to pass*.
- **Think and feel** – *I think that I will know what to select when I will try it., I feel anxious because I don't know what I really like, I am so stupid! Everybody knows what to do apart from me*.
- **See** – *Older colleagues who have great lives because they specialized in engineering domain, Professors teaching engineering classes; some of them in very boring way*.
- **Say and do** – *I'm so confused!*, *My friend started 2 internships but she was not tasked with any interesting jobs to be done*, *Maybe I should choose another major to study*.

The results have been compiled into the empathy map template and analyzed by the team in the next stage of the workshop. Based on the prepared empathy maps, each member of the project teams developed a set of insights. According to assumptions the insights should present implicit needs, unrecognized truth, discovery of what is missing or an explanation of why she acts like that. The sample of insights for student Lucyna is as follows:

- *Lucyna listens all her colleagues, but she wants do decide on her own;*
- *Lucyna sees that getting into engineering domain is worth effort, based on older colleagues examples, but she wants to find internal motivation triggers;*
- *students do not approach the process of education track selection professionally but only criterion is amount of energy that needs to be exerted;*
- *students neglect professional approach to choose university courses, they often look for others' opinions;*
- all the insights served as an input to the next workshop activity – define the problem.

Stage 2: Define – Define the problems and challenges

On the basis of the insights gained in the previous step, HMW (How might we help…) generative questions were formulated. Some of the HMW questions for student Lucyna prepared during define stage are presented below.

- *How might we help [Lucyna] that [is anxious because she doesn't know what job to do] to [find an internship where she can really learn how to do a job]?*
- *How might we help [Lucyna] that [has really bad experiences with regard to internships] to [be able to test her assuptions related to dream job position in the real environment]?*
- *How might we help [Lucyna] that [doesn't want to make decisions by her colleagues' voices] to [find the sources of internal motivation]?*

After time planed for HMW formulation was over, teams discussed the selected questions and explained the *logic* of how they did get from personas analysis to HMW questions. Analysis conducted together by all teams with regard to insights and HMW questions resulted in identification of most

important needs that have been summarized. The list of sample needs divided by stakeholders is presented in table 1.1.

Table 1.1. *Example needs formulated from generative questions*

Students	Academic Teachers	Career Offices Workers
Need for identifying true passions and guidance in order to make it into profession	Need to be inspirational about workplace, not frightening	Involve professors in the process of students' identification of career
Find the sources of internal motivation	Keep up-to-date about market trends and orientation tools	Help students to understand they have to start from their passion to build their dream job
Experience to better understand yourself	Increase student engagement and critical thinking	Not focusing only in providing "good employees", but in providing good professionals in general
…	…	…

Source: (DYLMIC Project Intellectual Outcomes Documentation)

HMW questions were the triggers for creating ideas for solutions in terms of techniques that should be included in Student Purposeful Development Toolbox.

Stage 3: Ideate – Create Ideas

In the first step of the ideation phase, the most important HMW questions were selected by the team (each team member voted for the 4 HMW questions developed that he or she considered as the most important). As a result of the voting, the 4 HMW questions were selected for ideation session. Having these questions in mind, each team conducted a 10-minute brainstorming session to generate ideas related to the tools and techniques selection with short justification how the technique could address the need(s) identified. After the completed brainstorming sessions, the generated ideas were analyzed, their relevance was assessed, and a summary was prepared.

Stage 4, 5: Prototype & Test – Create a Solution & Try Solutions out

During the prototyping phase, each method and technique selected as potentially useful was analyzed and discussed. Finally the stakeholders' needs were matched with prototyped solutions with the use of cross-table. This procedure allowed to select appropriate tools and techniques to be included in the Student Purposeful Development Toolbox. All the techniques selected with authors' names and year of the publication are presented in table 1.2.

Table 1.2. *Techniques included in Student Purposeful Development Toolbox*

Author| Source	Technique | Tools Name
Burnett at al. (2016)	Failure Reframe, Good Time Journal, Design Life Principles, External Observer, Well-Being Compass, Life Dashboard, AEIOU, Odyssey Plan, Support Circle
Checkland (2000)	Rich Pictures
Clark at al. (2012)	Personal Business Model Canvas
Dennis et al. (2010)	Change of Perspective
Gati et al. (2021)	Career Mind Mapping
Gurl (2017)	Personal Swot Matrix
Joshi et al. (2013)	Talent Identification
Moreira (2019)	Cognitive of Reconstruction, Identify Your Values, Set Goals
Utgoff (1989)	Decision Trees

Source: (DYLMIC Project Intellectual Outcomes Documentation)

The techniques identified and included in the toolbox have been carefully described in the form of manual that has been provided to stakeholders at the partners' universities. The toolbox will be tested, the feedback collected and all needed improvements planned.

Discussion – Implications for Agile Career Education

The research confirms that career agility can be meaningfully cultivated through a structured, co-designed educational approach. By aligning conceptual insights with stakeholder-driven prototyping, the BE(A)ST framework offers a practical model for integrating agile thinking into career education. This section reflects on how the framework addresses key gaps in traditional models and enhances student engagement, identity-building, and employability. The three core dimensions of career agility – technological adaptability, learning agility, and proactive career navigation – emerged clearly from both the literature (e.g., Coetzee et al., 2020; Khalid & Al Zahrani, 2024) and the empirical processes of persona validation and stakeholder workshops. The development of the Student Purposeful Development Toolbox marks the realization of the paper's primary goal. Through qualitative insights gathered via Design Thinking workshops and quantitative validation of student personas, the BE(A)ST framework was operationalized into a set of techniques directly aimed at fostering the core competencies of career agility – technological adaptability, agile learning, and career navigation.

The alignment between the Toolbox content and the identified stakeholder needs confirms the framework's relevance and usability. As such, the research and development objective of this study has been fully achieved.

Beyond addressing individual career planning, the framework also has broader institutional implications. By integrating agile development principles into university curricula and career services, higher education institutions can shift from reactive, one-size-fits-all models to more dynamic and student-centered systems. The persona-based validation process revealed substantial diversity in student needs, motivations, and readiness, indicating that tailored support mechanisms – such as the tools included in the Student Purposeful Development Toolbox – can play a crucial role in enhancing perceived self-efficacy and career ownership among learners.

The use of Design Thinking as both a research method and an operational philosophy proved particularly effective. On the meta level, it structured the development of the BE(A)ST approach itself; on the application level, it became a guiding principle in helping students navigate their own paths. This dual usage enhanced the credibility and coherence of the final framework. Techniques such as empathy mapping, HMW (How Might We) questions, and iterative prototyping ensured that solutions were not only theoretically sound but also practically resonant with users.

One important insight emerged from the quantitative validation of personas. Many students had difficulty identifying with behavioral models when distracted by surface-level details (e.g., hobbies or demographic characteristics). This suggests a need for further educational scaffolding to help students reflect more deeply on their professional identity and behavioral tendencies. Such findings underscore the importance of not just delivering tools, but also guiding students in their reflective use. Moreover, the collaborative workshops and cross-stakeholder engagement revealed that academic staff and career officers must also be equipped to support agile career planning. Teachers play a critical mentoring role, and their ability to align course content with labor market needs and encourage student exploration is vital. Similarly, career services should transition from traditional counseling to more facilitative, design-oriented coaching approaches.

Conclusions and Further Research

It is increasingly popular to say that universities should prepare future staff members for jobs that do not yet exist, using technologies that have not yet been invented to solve problems that are not yet known to be problems (Jackson, 2008). In order to succeed, future employees should be able to easily navigate in VUCA environment.

This study introduced the BE(A)ST framework as a comprehensive response to that challenge. Beyond its practical applications, this research contributes to the theoretical discourse by emphasizing professional identity, learning agility, and proactive career navigation as central to employability in the digital era. The framework also addresses a systemic need within higher education: to shift from transactional and static models of career support to dynamic, co-created processes that reflect the realities of the VUCA world. Furthermore, our findings align with broader perspectives on career education as a form of social innovation. As argued by Reid and Kelestyn (2022), design thinking can serve as a tool for challenging neoliberal assumptions around employability and promoting equity in graduate outcomes. Similarly, Williams et al. (2021) highlight the transformative potential of approaches that center student agency and professional identity.

The strength of this research lies in its iterative, human-centered design. Nevertheless, some limitations must be acknowledged. The timing of the student survey likely reduced response rates, and the challenges encountered in persona interpretation suggest the need for further user training and reflection facilitation. Future research will focus on the implementation and impact assessment of the digital platform Career ProVision, which aims to scale the BE(A)ST methodology by offering interactive and personalized access to its tools. Longitudinal studies are also needed to evaluate the framework's effectiveness in improving long-term career outcomes and readiness.

In conclusion, the BE(A)ST framework represents a robust and innovative step toward equipping future professionals with the agility, tools, and mindset to navigate and thrive in uncertain, fast-changing environments.

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